

432 MHz AND ABOVE EME NEWS

MARCH 1999 VOL 27 #3

ALLEN KATZ, K2UYH
Editor

ENGR DEPT., THE COLLEGE OF NEW JERSEY, TRENTON, NJ 08650-4700
(W 609-490-2817
OR H 443- 3184, FAX 609-443-1713, AND EMAIL:
[Allen Katz, K2UYH](#)

PRODUCTION ASSIST: **TOM KIRK, KA2VAD** (908-521-2049).

NETNEWS EDITOR: [G4RGK, DAVID DIBLEY](#)

SKEDS CORD & DIRECTORY: DL4EBY/DK0TU, KLAUS TIEDEMANN,
HALSKESTR.35, D-12167 BERLIN, (49-30-7955467), E-Mail:
[Klaus Tiedemann.](#)

E-MAIL LIST CORD: [Scott KD4LT](#)

*** NA EME BBS: 704-284-4854 ***

EME NETS

14.345, 10 AM ET SATURDAYS, AFTER VARO NET SUNDAYS:

- NET CONTL: JOE, K1RQG (207-469-3492), E-MAIL: [Joe, K1RQG](#)
- EME STANDINGS: JIM STARKEY, W0KJY, 3845 CAPITOL DRIVE,
FT. COLLINS, CO 80526, (970) 226-0669)
- THE NL WEB VERSION IS PRODUCED BY W6/PA0ZN AND
AVAILABLE AT:

[432 MHZ AND ABOVE NEWSLETTERS.](#)

[432 MHz AND ABOVE CHAT line](#)

432 AND ABOVE PHOTOGALLERIES

CONDITIONS

Contests are both good and bad. Contests generate lots of activity when they are going, but may actually diminish participation on non-contest weekends. With all the contest activity this time of year, it is not surprising to hear comments on the lack of activity on just "ordinary" SWs. The 2nd Jan SW on 70 cm was kind "ordinary", but there was still plenty of stations around to work. In March the DUBUS/REF Contest on 144 and 1296 will attract some stations away, but 70 cm'ers will have their chance in April when the focus of the DUBUS/REF contest will be 432. The SSB Contest on 1296 went reasonably well. There was good activity, although some "big guns" and "smaller guns" were conspicuously missing. A summary of the "SSBfest" (as K5JL refers to the contest) scores are shown at the end of this NL. Unsurprisingly OE9XXI is at the top of the list with 910 points. Peter is followed by OE9ERC with 793 points. The official winners will be announced in next months NL.

Dxpedition possibilities continue to bud. See DL6LAU's report for info on Market Reef, PA0PLY on BV progress and ON5OF (in NN).

CT1DMK:

Luis reports a modest score in the SSB Contest for the 2 hours he could be on. All Luis' QSOs were on SSB. His log reads as follows: 0218 OE9XXI (44/55) JN, 0220 OE9ERC (43/55) JN, 0223 K2DH (44/54) FN, 0226 K5JL (54/54) EM, 0243 N2IQU (52/54) FN, 0251 K2UYH (54/54) FN and 0312 S59DCD (44/43) JN for a total 7x3 or 21 points.

DL3EAG

Stefan reports on the Jan SW -- Due to illness in the family, I worked only a few stations on 70 cm as follows: On 30 Jan JA5OVU (539/549), and on 31 Jan DF3RU (549/549), 7M2PDT (429/O) and I5MPK (539/559). Heard were DL9NDD, F5FLN and K1FO.

DL6LAU

Carsten is trying to arrange for 432 EME from Market Reef - OJ0AU (and OH0AU) -- I will most probably visit Aland for a 2 week period in July. During this time I will again go to Market Reef and operate OJ0AU with some other operators mainly on HF and 2 m. There is plenty of space available and if someone out of the 70 cm EME community is interested to join, I can be reached at: [DL6LAU](#) Anyone who is interested should organize all the 70 cm EME - antennas, hardware, preamps, etc. I have an amplifier for 70 cm and 8 x 33 el

9BV yagis available, but I gave the framing and rotator to a friend. Some of the Ops (including me) will travel with their wife and kids, so even a family holiday on Aland, combined with 'some activity' from OH0 and OJ0 is possible. Any takers?

DL9NDD

Ginther worked on 30/31 Jan on 432 **KA0RYT, N7LQ for an initial (#), K1FO, WE2Y, IK5QLO, W7BBM, HP3XUG, I5MPK, K2UYH, VK4AFL # and JA5OVU**. In skeds nil W7KK, nil W7ALW, nil WL7U and nil VK4KAZ. Ginter says that the condx seemed ok, but the activi-ty was poor.

F6CGJ

Louis fills us in belatedly on his ARRL Contest activity [Due to an error on my part this did not appear earlier] -- The 2nd leg of the ARRL Contest was especially pleasant because of fine WX and good activity... But I spent too much time in bed. My final score was 66x35 on 23 cm, 30x18 on 70 cm and 20x13 on 2 m (without el). However I was very sorry to miss RW3BP on 1296. I heard him, but confused him with a W3 station before the US window was opened. Then a great time when I worked **DJ5MN with 2 yagis and linear pol**. Presently there is very much work and not enough time for EME.

HA5SHF

Csaba reports on his group's SSB EME Contest results on 23 cm -- We QSO'd on 30 Jan at 1936 **HB9BBD (57/549) JN on SSB/CW, 1958 OE9ERC (56/449) JN on SSB/CW, 2008 OE9XXI (57/54) JN on SSB/SSB and 2021 LX1DB (57/559) JN on SSB/CW**. Unfortunately at 2054 we were forced to QRT by a preamp failure, and did not have any FHX35s to repair it. P>

HP3XUG

Louis was 2 sequences late for his DF3RU sked and copied him (O) but never received a reply to his calls. He copied DL8OBU (M/O) and R's but is not certain of a QSO as he copied (O's) again in the last period. Louis copied nil from 7M2PDT. NC1I was heard with big sigs.

I5TDJ

Piero's reports on his Jan SW 70 cm activity -- During the 29-31 Jan SW, I found conditions slightly below normal. Signals were not at the best and libration was quite speedy and deep. Anyway Faraday rotation was favorable for "local" QSO's. During all the periods I was QRV, I was able to copy my own echoes. I worked on 29 Jan after 4 calls **G3SEK (449/339)** and had a partial with DL4KG on sked, on 30 Jan SV1BTR (M/O) on sked for initial #108 and country 31 and (after 5 calls!) **DF3RU (559/539), and on 31 Jan W7HAH (M/M)** on sked #109 and 1st MT and nil DL4KG in sked. Judging by the difficulty I had to work both G3SEK and DF3RU, I must con-clude that my callsign is one of the worst to be picked up on EME!

IK5QLO

Andrea sends his Jan NL report -- I was quite pleased to find rather high 432 activity level during the follow-ing 3 weekends. If it only would be always like this, HI! I con-tacted on 2 Jan OZ4MM and DL9NDD, on 24 Jan KD4LT, N4GJV and W7CNK, and on 30 Jan G3LTF for initial #44, JA5NNS #45 on sked, K1FO, DF3RU, NC1I, DL9NDD and CWNR OZ6OL.

K1FO

Steve says that a lot has transpired since his last report -- Unfortunately our house addition and remodeling is way behind schedule and way over budget. Originally it was projected to be complete in 4 months. At 6 months into the project, there is 2 months to go! [We had the same experience some years ago when we added to our house.] I was able to be QRV for the Oct SW of the ARRL EME contest. I decided to try to solve my polarity rotor problems by welding the HDR-300 output shaft to its drive gear. Although the "weld" looked suspiciously like brazing, I was assured that the parts were "welded". The HDR-300 went back in place the week before the contest. In order to be QRV for the contest I had to temporarily run all the cables into the basement where the shack was (and still is) temporarily located. Fortu-nately, the Thursday before the contest the contractor cut the old foundation wall for access to the new basement. Even more fortunately he cut a 4"x4" hole in the wall to allow a place to grab the wall. This allowed me to run all the cables through this hole (the foundation piece was still in place) on Friday morning. Making me triply fortunate was that all but 1 cable was long enough to reach the equipment! I was QRV again on 09 Oct just before moonset and worked W7QX. For the contest I was not able to put in a full effort. With 17 hours of operation on the 1st weekend my score was 88x29. Stations worked were 10 Oct UT5DL, SM3AKW, S52CW, UT3LL, DJ6MB, DL9KR, YO2IS, OH2PO, DL9NDD, HA1YA, DJ5MN, DK3FB, N9AB, G4ERG, F1ANH, F5AQC, ON5OF, UR5LX, DL4MEA, W8MQW, CT1DMK, WA9FWD, KB4CNI for initial #537, KA0RYT, W7CNK, DF3RU, G3HUL, UA4API, K2UYH, G4ALH, K5WXN, DK8VS, N4GJV, OE5EYM, OE3JPC #538 and a new grid, JA2TY, JJ1NNJ, 7M2PDT, JS3SIM, K5AZU, JL1ZCG, JR1RCH, K4QI, K0RZ, W7QX, K5GW, JJ3JHP, VK4AFL, JA5OVU, W7CI, JH3OYI #539, JA5NNS and JH4JLV, and on 11 Oct G3LTF, IK5WJD, DL1YMK #540, G4BRK #541, OZ4MM, N2HLT, KR5V (same as KN6M), UA6LGH, S51ZO, K9BCT, KB4CNI (dup), I5TDJ, UT3LL, S57RA #542, K7XD, N7LQ #543, DL8OBU, OE5JFL, HO1A (same as HP3XUG), W7GBI, F5FLN, I5CTE, IK5QLO, W7HAH, KL7HFQ, VE1ALQ, K5KDK (same as F5SDD), W6WE, KD4LT, K1OR, W7BBM, W7GBI, DL3EAG, N2IQU, JH1EFA, WB2VVV, WA4NJP partial, WE2Y and JA4BLC. [Steve's QSO with DK8VS was quite a milestone. It was his 5000th 70 cm EME QSO!] I was not on for the Nov SW as the cables had to be removed to allow for removal of the old basement wall section and the start of

the framing for the addition. Unfortunately by not being QRV in Nov I set myself up for disaster on the Dec weekend. Things always fill the available time. I had the good fortune of having 50 deg F WX the week before the Dec SW allowing the contractor to dig the trench for the cables and a new 4" conduit from the house to the antenna. Now that the cables were laid permanently in the ground they were too short to reach the temporary shack location. Late Thursday evening I had all the cables connected except the polarity rotor. A QSO with W8MQW late Thursday night, 04 Dec gave me a false confidence that I was ready for the 2nd contest week-end. On Friday I was tied up with work and got home less than an hour before the start of the contest. I finished extending the polarity cable 10 minutes before the start of the contest. However, the polarity didn't turn. After spending an hour trouble shooting, I finally decided that it was a mechanical problem not an electrical one. I decided to operate without polarity (the array was at about 45 deg.) I worked on 05 Dec **GD4IOM, UA4API (dup), VE1ZJ, G4RGK, F6CGJ, F5KDK (dup), DJ3FI for initial #544, EA3DXU, OZ6OL #545, NC1I, W7ALW #546, UT3LL (dup), W1ZX and JH1XUJ**. On Saturday afternoon (after a long night's sleep) I pulled the HDR-300 polarity rotor down and found out that the "weld" had broken and that as I suspected it was brazed. With random polarity (depending on the wind) on 06 Dec, I worked **G3SEK, S57RA (dup), SV1BTR and WA4NJP** for a total of 102x34. I operated about 5 hours the 2nd weekend for a total of 23 hours for both weekends. I apologize for those who were calling but I did not hear because of my polarity problems. Overall conditions were very good on both contest weekends. Activity was good the first weekend. It seemed poor the 2nd weekend, but without polarity rotation this may not be a valid observation. I got the polarity rotor back up on 20 Dec with the gear and shaft welded this time (thanks to KA1ZE). As of the end of Jan it is still holding up. I had hoped to be QRV from Christmas to New Year as I was on Vacation. Instead I worked 16 hour days on the house trying to finish the living room so that room could be reclaimed. Worked on 20 Dec were **W7CNK and KD4LT**, on 26 Dec **W7CNK**, 27 Dec **DF3RU, OE3JPC, KA0RYT and DL3EAG**, on 02 Jan **I5TDJ, DJ6MB and OZ6OL**, and on 03 Jan **G4ALH, DL7APV, W7CNK, N2IQU, DL8OBU, K5WXN, K7XD, DL9NDD and DJ3FI**. I had a bit of a setback the Monday before the ARRL Jan VHF contest. That night a very strong thunderstorm rolled through. This was the same storm that caused a large number of tornadoes when it passed through Tennessee. The array survived the high winds, but I took somewhat of an indirect lightning hit. All of the cables to the tower were disconnected except for polarity. Items damaged included the Pro-Search rotor control I used for polarity rotation, the A/D board in the computer, the second stage preamp in the shack (which was not connected to anything!) the final amplifier in the 432 transverter and the memory function of my elevation controller. Thanks to some help from NC1I (loan of a transverter) and W2UHI (A/D board) I was back on for the ARRL VHF contest. Conditions were excellent although there were a few large rapid polarity shifts. I

worked the following stations with grid squares received from most of them: on 23 Jan W7CNK, W7QX, and KA0RYT, and on 24 Jan KL7HFQ, JA5OVU, G3SEK, SM2CEW, S52CW, DL8OBU, UT3LL, DJ3FI, N4GJV and KB4CNI. The operating hours were a lot more friendly then the SWs. I wonder when moon conditions are similar (i.e. 23-24 Jan verses 30-31 Jan), if we should go for the weekend with the more friendly operating hours. [These are the 1st comments I have received on the '99 SW choices. What do others think?] I worked on 29 Jan at 2100 I5MPK and G3SEK, on 30 Jan VE1ALQ, KA0RYT, IK5QLO, DL9NDD, OZ6OL, K2UYH, G3HUL and EA3DXU, and on 31 Jan N4GJV, K5WXN and N2HLT. I found a few minutes to start catching up on QSLs. I has received additional QSLs from DJ5MN, OM1TL and DL3EAG after I had replied to their last cards. If they didn't receive my card for some reason, please me know (in the NL) and I will send another. My 432 EME totals are now #546 initials, 49 States and 75 countries.

K1OR

John reports that during the 2nd Jan SW on 432 nil with W5ZN, and QSOs with W1ZX and WA4NJP - no problem. John also CWNR W7HAH many times. He heard him very well but had no luck.

K5JL

Jay worked on 1296 during the "SSB Fest" on 31 Jan at 0013 OE9ERC, 0020 K2UYH, 0041 KB2AH, 0045 HB9BBD, 0046 VE1ALQ, 0049 N2IQU, 0053 OZ6OL, 0100 W2UHI, 0115 S59DCD, 0158 VE6TA, 0207 WD5AGO, 0209 OE9XXI, 0224 CT1DMK, 0237 K2DH, 0242 WA4NJP, 0336 W7SZ CW TO SSB and 0354 N6BQ for a total of 17x12. I did not spend much time as the WX was very bad, but it was much fun. Let's do it again!

K7XQ

Jeff in CM97qi (Atwater, CA) will be QRV on 70 cm with a month and is interested in skeds. He has 2 x 9 WL yagis with full elevation and a 400 W PA. Jeff can be reached on e-mail at:

K7XQ

or by his Webpage at:

[K7XQ WEB Page](http://K7XQ.WEB.PAGE)

KD5FZX

Mats (x-SM6IKY) Mats is a new station on 1296. He made his appearance during the 1296 SSB Contest. He is running 600 W from a 4 x 7289 water-cooled PA (all HB) to a 5 m Hughes dish. Mats reported on different materials for the O-rings used in water cooled amp. He says AFLAS is the best low-price material available. He also notes about water-treatment that his coolers are made of aluminum, and that he noticed some "pitting" a couple of years ago. He asked a water-treatment company, how to prevent this problem. They gave him some

HYDROZINE (Poison) to add to the water, 1 drop HYDROZINE per gallon of distilled water. This cured the problem with corrosion. His water is clean and non-conductive after 12 months use. Mats address is (M. Bengtsson, 649 Parkwood circle, Duncanville, TX 75116) and his e-mail address is .

N2IQU

Mark in the 23 cm SSB Contest worked on 30 Jan at 2209 S59DCD (53/55) JN, 2210 GW3XYW (54/55) IO, 2216 HB9BBD (59/59) JN, 2220 LX1DB (58/58) JN, 2229 DF9QX (33/52) JO, 2234 HB9BHU (55/55) JN, 2241 ON5RR (53/55) JO, 2246 DF3RU (43/55) IO, 2250 G3LTF (54/54) IO, 2319 DF4PV (44/57) JN and 2328 OE9ERC 58/57 (JN), and on 31 Jan at 0024 OK1DFC (55/44) JO, 0030 K2UYH (55/56) FN, 0036 KB2AH (58/57) FN, 0048 K5JL (58/58) EM, 0100 OZ6OL (44/55) JO, 0116 W2UHI (54/55) EN, 0128 WD5AGO (54/55) EM, 0236 OE9XXI (58/56) JN, 0241 CT1DMK (52/54) IN, 0248 WA4NJP (539/55) CW/SSB EM, 0249 K2DH (55/57) FN, and 0255 N6BQ (53/42) CM. Mark's total was 23x8 for 360 points. About 6 more stations were heard but not worked. Mark is also working on 10 GHz. He has recently acquired a 10 kW CW TWTA (VTX 6383A2) government surplus. He is currently mounting the TWTA in a frame and working on plumbing manifolds. The power supply and tubes (he has 3) were manufac-tured in 1991. He says it is 10 times too large, but it should last forever at 1.5 kW. Mark has a Scientific Atlanta 5 meter dish with az/el mount working and ready for the feed/preamp/relay to go in. Look for Mark this summer on 3 cm. Mark also writes that plans for the Aug Symposium in Rochester are moving along well. The plan is to attract new blood to EME and give "new guys" another outlet for information and the helping hands needed to get them on. Programming will be targeted for the new operators in the early sessions. He emphasizes that in no way is this conference trying to interfere or replace RIO, but just trying to keep interest up in the off year.

N6BQ

Hoppie's EME SSB Contest report --- My SSB showing was poor at best with only 350 W and 12 foot dish, but it was fun to actually work several stations. I QSO'd on 31 Jan at 0250 OE9ERC (42/47) JN47, 0257 N2IQU (43/53) FN13, 03004 OE9XXI (53/53) JN47, and 0351 K5JL (43/33) EM15 for 4x3 or 24 points. Before the contest I worked on CW on 30 Jan W2UHI and heard VE4MA - very little activity, but conditions seemed very good. On 31 Jan I also QSO'd S59DCD, OK1DFC, F5PL and WA4NJP on CW, and heard was VE6TA. Conditions on the 31st seem to be worse than previous night. I was still using the TH328 PA at 350 Watts output. I hope to have the TH327 PA QRV for the next SW after repairing an arced-through cathode bypass capacitor.

NL7F

Bill's 1296 EME report for Jan -- I worked on 1 Jan W7GBI (M/539). On 30 Jan

the temp rose above -35 C and unfroze the rotators long enough to work **OK1DFC (O/O) for initial #38, and on 31 Jan OE1XXI (44/44) on SSB.** I have a new e-mail:

[NL7F](#) or [NL7F at ARRL](#)

OE9ERC

Erich's EME report Jan -- In the 2nd NL 23 cm SSB Contest I made 31 QSO's in 13 fields for a score of 767 points. My con-test log read as follows: on 30/31 Jan **OE9XXI (57/57) JN47, ON5RR (43/52) JO, HB9BBD (56/56) JN, HB9BHU (54/55) JN, DF9QX (55/56) JO42, LX1DB (57/56) JN39, IK3GHY (44/55) JN65, OH2DG (54/56) KP30, HA5SHF (449/56) JN97, DF3RU (44/56) JN59, GW3XYW (55/57) IO71, S59DCD (55/57) JN76, OK1DFC (54/55) JO60, G3LTF (54/56) IO91, DF4PV (53/57) JN49, N2IQU (57/58) FN13, K2UYH (55/56) FN20, K5JL (56/57) EM15, OZ6OL (54/55) JO65, W2UHI (55/55) EN73, RW3BP (O/559) KO85, CT1DMK (43/55) IN50, K2DH (55/56) FN12, VE6TA (44/55) DO31, N6BQ (42/42) CM97, K3HZO (33/52) FN20, W7SZ (449/55) CN85, WA4NJP (43/55) EM84, KD5FZX (55/54) EM12 and initial #201, W0KJY (43/52) DN70 and WA8WZG (33/55) EN81.** I heard also in the contest **VE1ALQ, KB2AH, NL7F, K9ZZH and W4RDI.** I will be QRV on 23 cm in the DUBUS Contest then I will be away on holi-day for 3 weeks to Cuba.

OE9XXI

Peter's EME report -- In the 2nd SSB EME Contest on 1296 on 30/31 Jan I achieved a score of 33x14 or 910 points. Contacts included **KD5FZX (54/55)** for initial #236. Unfortunately no French and no Japanese station were heard. Back on 1 Jan I worked on **2300 MHz JA8IAD (449/559)** for initial #51 and new field. Concern-ing the SSB Contest Rules, I think that its time regulation (the second local Moonpass) is not very fair to all participants. It cuts the competitiveness of the JA's and the NA's. Consider that the JA's 2nd local moonrise on Saturday corresponds to the NA's 1st (!) moonset and that the NA's 2nd moonset corresponds to the JA's 3rd (!) moonrise. This may result in less activity between NA and JA because the 1st and the 3rd local moonpasses are out-side of contest time, which is advantageous for the EU's. I think it would be better to install a 25-hour block e.g. 1200 to 1300 which provides similar conditions to all. [I see your point. What you propose was the actual intention of the contest rules, i.e., everyone to have only one common rising and Moon window. I did not consider the JA's 1st local moonrise of their weekend to be part of the contest weekend because it was before 0000 (UCT). I will try to make the rules clearer (better) next year.]

OH2DG

Eino had very changeable WX during the 2nd Jan SW -- The 1st day temperature was -25 C and on Sunday near zero, so every metal parts of the dish

was cover with hard ice and the rotator did not operate. After heating and drying, it worked ok. I miss my sked with I6PNN because of this problem. On the other hand the WX clear, so I able to use my CCTV camera for antenna control. On 70 cm I had nice QSOs with **KB4CNI**, **VE1ALQ** and **JA5NNS** for initial #174. The 2nd day during the SSB contest on 23 cm I worked on 30 Jan **OK1DFC** (539/539) **JO**, **OE9XXI** (57/43) **JN**, **HB9BBD** (57/54) **JN**, **S59DCD** (54/33) **JN**, **OE9ERC** (56/54) **JN**, **DF3RU** (539/549) **JN**, **ON5RR** (539/519) **JN** and **LX9DB** (56/55) **JN**, on 31 Jan **K2UYH** (33/519) **FN**, **DJ5MN** (O/O), and on 1 Feb **DF4PV** (559/439), **K2DH** (559/559) **FN** for initial #62 and **N2IQU** (559/539). My contest total was 5 on SSB and 1 on CW/SSB in 2 sectors.

OK1DFC

Zdenek had WX problems during the SW. The temperatur was -10 degs C and strong snow fall all time. On the 1st day there was low activity, but I had skeds with a couple of stations. Our **NL7F** sked was interesting. **NL7F**'s dish was icebound in one elevation and azimuth position. We reorganized the sked via e-mail for a time when Moon was in front of his dish. We used 1 minutes sequencing and completed a QSO (O/O). Other stations worked on 1296 were nil **RW3BP**, **VE4MA** (O/O) for initial #71, **W2UHI** (559/549), **VE6TA** (O/O) #72, **NL7F** (O/O) **WAS** 14 and **BP SQR**, **OH2DG** (539/539), **HB9BBD** (55/51) on SSB, **OE9XXI** (55/44) on SSB, **LX1DB** (55/44) on SSB for **DXCC** 26 and #74, **S59DCD** (559/339), **S59DCD** (44/54) on SSB, **ON5RR** (O/O), **OE9ERC** (55/54) on SSB, nil **W3XS** - trouble with WX, **K5JL** (55/44) on SSB, nil **WA4NJP**, **W2UHI** (55/52) on SSB, **K2UYH** on SSB (55/52) **KB2AH** (55/53) on SSB, **N6BQ** (559/539), **RW3BP** (M/M) #75 **DXCC** 27 and **KO SQR**, **VE6TA** (O/O), **F1ANH** (55/44) on SSB, **LX1DB** (559/559), **DFRU** (339/349), **SM2CEW** (559/549, **GW3XYW** (559/549) and **ZS6AXT** (559/559) - UFB signal from Ivo. I hope to be on for the **DUBUS/REF** Contest in FEB on 23 cm and after 2 years absence on 70 cm for the 2nd part. On 70 cm I will use a 3.8 m dish and 1.5 kW output. My e-mail address was incorrectly listed in the Jan NL. The correct address is:

[OK1DFC](#)

ON5RR

Marc finally had a good EME SW -- No rain, no wind, clear sky and cold (about -3 deg C). We got the dish up and worked the following stations: **HB9BBD**, **OE9XXI**, **S59DCD**, **OE9ERC**, **LX1DB**, **OK1DFC**, **OH2DG** and **N2IQU**. The big guns (5) were worked on SSB. The strongest signal came from **LX1DB**. We were only active for about 4 hours, just enough to check all equipment. The azimuth motor has some problems, probably the result that the dish crashed two months ago. It should be easy to fix, but heavy work. We plan to be active in the **DUBUS** Contest.

OZ4MM

Stig sends the following info -- In the last SW I lost my elevation actuator. I had just finished 432 operation, and had the dish down for feedline change to 1296. I reached the Moon, and heard great signals on 1296 and many SSB signals. But after few minutes the elevation drive gave up, and I had to leave the dish at 40 degs elevation! Fortunately the next day I was able to get the dish in to its park position, else it would probably have been destroyed in a big storm we had a few days later. Before the elevation problem I worked on 432, on 30 Jan **VK4AFL (429/O) for initial #180, CT1WB (429/M) #181, I5MPK (569/579) and UT3LL (539/O)**. On 1296 I missed my skeds with RW3BP and DK5AI due to the problem. I expect to have the elevation back in operation for the DUBUS/REF Contest.

OZ6OL

Hans writes -- My 432 system is not the best and the Danish winter WX a little cold and wet for antenna work, but it will be better soon!. On 432 I worked on 21 Jan **W7CNK (O/O), NC1I (559/549) #24 and on 30 Jan K1FO (449/449) and W1ZX (O/O) for initial #25**. I have tried some skeds on 432, but nil was heard from PY5ZBU, and due to family conflicts I couldn't be on for 7M2PDT and OE3JPC - sorry. The next day I worked **7M2PDT** on random with FB signals. On 1296 I heard nil in a sked with NL7F and copied 9H1ES FB (429) but he couldn't hear me. In 1296 SSB Contest I worked **HB9BBD (56/54), OE9ERC (55/54), KB2AH (55/53), K5JL (56/54), N2IQU (55/44), K2UYH (54/54), S59DCD (52/52), OE9XXI (56/54) and K2DH (55/55)** for 9 stations in 3 sectors. Earlier in Jan I worked on 1296, on 3 Jan **HB9SV, F1ANH and VE1ZJ**, on 23 Jan **OE9ERC and W2UHI**, and on 24 Jan **F5PL, ZS6AXT, OE9ERC, W2UHI, VE1ALQ, K5JL, SM2CEW, VE6TA for an initial (#), VE4MA #, W7CS, K4QI and KD4LT**.

PA0PLY

Jan sends an update on the current status of his "project" to put BV on EME -- I had some very welcomed donations from JA4BLC as well as the promise he to join in the operation of the station. Yoshiro donated a pre-amp and 2 power modules. Thanks to Yoshiro for his help. We are now working on the feed and the transverter. My idea is to donate the entire 23 cm transverter system to BV-land group, so they can on work on a more power full station for further EME later. Base on this, I would appreciate some further funds to finalize the transverter. Due to the limited available space, I decided on the DB6NT transverter because of its size. This unit matches well with the 2 modules and provides about 2 W RF output. At home I have almost finalized the driver units for my 10 GHz station. I think it will still be some months before I am QRV. I'll keep you updated.

RB5PB

Sergie using his 1.65 m offset dish, CP, 250 W in feed and FHX35 preamp completed QSOs on 23 cm during the SW week. He worked on 27 Jan **ZS6AXT**

(M/M), on 29 Jan W5LUA (M/M), on 30 Jan W2UHI (O/O), 31 Jan VE1ALQ (O/O), K2DH (O/O), G3LTF (O/O), OK1DFC (M/M) and his 1st random CW/SSB with OE9ERC (44/O), OE9XXI (44/549) and KB2AH (34/449). Nil was heard from OZ4MM and W4NJP.

S52CW

Uros was active on 432 at the end of the Dec/Jan SW. He found very nice conditions, during Sunday evening, but not many stations QRV. Uros worked K1FO, NC1I, SM2CEW and KD4LT. Heard were DL8OBU, DJ3FI?, W7QX, W7CNK and N4GJV.

SV1BTR

Jimmy's SW report -- I had to cancel my sked with HP3XUG on 31 Jan because of high static noise (S-6). I did QSO on 70 cm partial K7XD (O/O) - no R's, W1ZX (539/549) - very good signal on V pol, I5TDJ, NC1I (549/559) - best in V pol even with high VSWR due to wet fiberglass masts, N4GJV (429/549) - copied in V pol, nil JA5NNS and nil IK5QLO. I had 8.5-9 dB of Sun noise today. No matter how much loss I put before the 1st stage, my preamps are desensed. After a lot of tests and counseling from VE7BQH, I am almost sure that I am 4 dB worse off than other stations. I can not see cold sky due to QRM. Only 0.5-1dB if compared to dummy load. [A dummy load is not a good reference! Very small changes in impedance can make big changes in preamp gain. It is best to reference to cold, but this is not easy if you have high interference. A problem I experience on 70 cm too.] I will change to a new cavity ATF36077 first stage preamp by KA0RYT and an unconditionally stable 2nd stage. This will help on days that the QRM is down. Things seem to be much better now. I acquired a better understanding of my IMD problems, the environment and related preamp considerations with the help of Lionel, VE7BQH.

UR5LX

Sergey could not be QRV for his skeds with WW2R, W7ALW and CT1WB due to bad WX - sorry. Sergey did QSO on 70 cm on 30 Jan VK4AFL for initial on #361 but heard nil from VK4KAZ.

VE3FAC

Richard is near QRV on 432 EME. He has an array of 8x22 FO yagis with full elevation on a 20 m tower and a PA running 700 W, possibly 900 with a couple of drive changes. Richard will have 1500 W sometime this summer. His only problem is no preamp as of yet!

VE4MA

Barry was on 23 cm during the SW, but is still fighting his OZ9CR amp. He has neutralized the UPX and is getting much better results. He worked OK1DFC, W2UHI and VE6TA and heard K2DH - the loudest signal on! With his new

preamp he thinks he is now hearing well again. He will be on 3 cm and maybe back on 23cm for the Feb SW.

VE6TA

Grant's had some nice SSB QSOs from his new DO33 during the 1296 SSB Contest. He QSO'd on 31 Jan at 0150 **HB9BBD JN47, 0155 K5JL EM15, 0205 OE9XXI JN47, 0228 OE9ERC JN47, 0315 K2UYH FN20** - all on SSB for a total of 5x3. Grant also heard K2DH and WD5AGO but not response from them on SSB.

VK4AFL

Trevor found the 2nd Jan SW conditions to be very good. I am now running a KA0RYT cavity preamp, which has made a big difference. Trevor asks if anyone had experience with using 4CX400A's in a K2RIW amp?

W0KJY

Jim operated during the 1296 SSB Contest, but had some 2 m feed-through that was bothering him on receive. Jim noticed that many stations call CQ on the same freq and suggests that we all spread out more! Jim worked **OE9ERC, OE9XXI, N2IQU, K2DH** and **HB9BBD** on SSB and **K5JL** on CW. **VE6TA** and **N6BQ** on CW and **KB2AH** and **OH2DG** on SSB were heard but not worked. He was on for all his skeds, but heard nil from **WA8WZG, ON5RR, RW3BP** and **IK6EIW**.

W1ZX

Willie was on 70 cm on 29 Jan, but at 2330 missed his **DJ3FI** sked - sorry. He worked on 30 Jan at 0000 nil **N2HLT**, 0130 **K1OR (559/O) for initial #290, SV1BTR (559/539) #291, 0225 KA0RYT (559/539), 0230 CT1WB** - missed sked because of the wrap around problem on the sked list, sorry, 0300 nil **DL3EAG**, 0425 **K2UYH (559/579), 0438 I5MPK (559/579), 0455 call from OZ6OL, 0517 W7CNK (559/569) and 0532 NC1I (579/579), on 31 Jan at 0130 G3SEK (559/549), 0323 DL7AGU (O/O) #292, 0340 HP3XUG (O/O), 0340 KL7HFQ (O/O) and 0510 W7HAH (559/569), and on 1 Feb at 0303 N2HLT (449/O) #293, 0310 W8MQW (559/569) and 0325 W7CNK (559/559)**. Willie is having some problems with his antenna polarization rotor turning in the cold WX - possibly water in the bearings. Willie was not hearing many Eur stations off the Moon because of the time - too late for the Europeans. He is still working on his 1296 equipment; 4 tube amp, power supply, etc. He hopes to be QRV on 23 cm soon.

W2UHI

Frank enjoyed working the SSB Contest and QSO'd the following on 31 Jan at 0055 **HB9BBD (56/56) JN, 0100 K5JL (55/55) EM, 0106 K2UYH (55/55) FN, 0111 OE9ERC (55/55) JN, 0117 N2IQU (55/55) FN and 0128 DL6YDH (43/53) JO**. All contacts were on 2-way SSB. Frank ended with 6x4 for 48 points, but closed

down early due to high winds. He also completed with RW3BP, his 1st Russian on 23 cm.

W5LUA

Al had his Jan EME weekend during the week due to a conflict with a high school football banquet that his wife and he had organized. He did work on 26 Jan on 3456.1 MHz **LX1DB** (549/559) for initial #5, on 27 Jan on 10368.1 MHz **DL2CAC** (O/M) for initial #24 - this was **DL2CAC's** initial EME QSO ever!, and on 29 Jan on 1296.075 MHz **RW3BP** (M/M) for initial #165. Al has now worked Sergei on 3 bands!

W7ALW

Barrie had a flood in his ham shack - a broken pipe. Everything had to be moved. Things are getting put back to normal, but Barrie did not expect to be on for his 432 skeds during the 2nd Jan SW.

W7HAH

Shep writes -- I didn't have any 70 cm skeds except with W5ZN and heard nil from him. Most of my activity was on random. I QSO'd on 24 Jan **W7QX** (539/339) and **KD4LT** (559/449), on 27 Jan **N7LQ** (M/M) for initial #194, on 29 Jan **IK5WJD** (M/M) #195, on 30 Jan **K2UYH** (569/559) and **W7KK** (O/O) #196, and on 31 Jan **I5TDJ** (M/M) #197, **W1ZX** (579/559) and **K1OR** (O/O) #198. I have been having receive problems. The antenna pre-amp appears to be cutting in/out or a relay acting up. The WX has been so bad, it is difficult to get things checked out. I am hoping for an early spring.

WA7CJO

Jim reports -- On 31 Jan, I was on 10 GHz and worked **LX1DB** (O/569) for initial #41. Since I had W7GBI and PY5ZBU in the shack, I did not stay on too long. The contact was in response to my CQ and was readable without using headphones. Everyone enjoyed the show. Incidentally, the 1st station I worked that was using an all solid-state amplifier was **G3WDG** on 19 March 1995. (Charlie was "M" copy and reported that his power output was 9 W. Later that year, on 20 Aug, I worked OH2AXH with "O" signals and power output was reported be 13 Watts. As far as I know, G3WDG was the 1st all solid-state station. LX1DB's signal is quite good and his solid-state amplifier (30 W) is certainly doing a fantastic job.

WD5AGO

Tommy was on for a short time during the 1296 EME SSB Contest. He worked 4x3 on SSB as follows: 0126 **N2IQU** (55/54) FN, 0137 **HB9BBD** (56/55) JN, 0201 **K2UYH** (56/55) FN and 206 **K5JL** (56/55) EM, and 0215 shut down. Tommy had problems with his SSB signal and says that he will stay on CW for now. He will also stay on 1296 for a while.

WW2R

Dave's reports that 30 Jan was disastrous -- Hail/thunder/lightening/high winds all evening. I lost commercial power, so no PA for UR5LX and G3SEK skeds. I used a 110 V 1 kW generator for RX, but heard nil. The power returned (and hence the PA) for DK3WG and DF3RU skeds, but I heard nothing. I decided that enough was enough at end of my DF3RU sked and went QRT to watch 45 minutes of lightening storms with all cables disconnected at tower base. Only good thing to come out of it all was that by putting a DCI "big" bandpass filter between preamp and transverter the intermod caused by the local channel 23 TV transmitter has been lessened.

ZS6AXT

Ivo reports on his Jan activity -- My 6 cm system worked fine on Thursday 21 Jan with 0.6 to 0.9 dB of Moon noise, so I setup tests with OE9ERC for Saturday. However after few days of nice WX we had a cloudburst of nearly 60 mm of rain on Friday and on Saturday. My Moon noise was down to 0.3 dB, with some moisture probably in the preamps! As result - Erich heard me and I did not hear him. On top of that, 10 mins before the sked my computer packed up, but I was able to follow the Moon with the help of its noise. Of course, for the next 2 days the WX was again nice. On Monday I was getting again 0.6 dB+ of Moon noise. I have a question: When scanning the sky with my dish I get a noise maxima of up to about 0.5 dB. Is this normal? Also when beaming to my other antenna tower, which is about 10 m away from dish, I get about a 0.4 dB increase of noise. During the ARRL VHF Contest I worked on Saturday **K5JL, OE9ERC and W2UHI**, and on Sunday **DL6YDH, F5PL, OZ6OL, W2UHI, K5JL, SM2CEW, VE1ALQ, K4QI and KD4LT**. CWNr were **VE6TA, VE4MA and KB0PYO**. On 27 Jan I worked RW3BP (M/M) for initial #141. Sergej was up to (429) at times, after we missed the sked a day before when my 23 cm transverter packed up due to a dead MAR- 1 in the oscillator chain. Sergej is probably my smallest station I have worked on 23 cm. He must have a really good preamp and ears, hi! On Saturday 30 Jan my sked with JA8IAD on 13 cm was successful - (M/M) reports, but solid copy for initial #27. Heard then were DF3RU and OH2DG on 23 cm. On Sunday, 31 Jan I worked LX1DB, DJ5MN (M/M) - his signals went on occasions up to (429) #142 and OK1DFC. Heard were PA3CSG, JA7BMB, F1ANH, OZ6OL and GW3XYW in their skeds. 9H1ES was peaking (429). I called him a few times with no reply. I was also listening to JA4BLC (589) in his 13 cm sked with G3LTF. I did not hear Peter. After I CWNr JA4BLC, but it was late for Yoshiro. There was not much activity on 23 cm, so I shut down. I will be QRV in the REF/DUBUS Contest and hope to see more activity then.

K2UYH

I was on 432 the 1st night of the SW and 1296 the 2nd as planned for a change. On 70 cm I worked on 30 Jan at 0318 **NC1I (57/54) on SSB, 0331 W7HAH**

(569/569), 0339 K1FO (579/579), 0353 DF3RU (559/559), 0425 W1ZX (579/O), 0437 DL9NDD (559/569), 0458 I5MPK (569/579), 0517 KB4CNI (559/449) for initial #609, 0529 WA4NJP (559/559) and 0745 VK4KAZ (O/O) #610. On 1296 I QSO'd on 30 Jan at 2337 HB9BBD (56/52) JN - Moon still in trees and 2353 OE9ERC (56/55) JN, and on 31 Jan at 0004 S59DCD (54/53) JN, 0008 KB2AH (54/56) FN, 0022 LX1DB (56/56) JN, 0031 N2IQU (56/55) FN, 0034 K5JL (56/56) EM, 0046 K2DH (55/55) FN, 0055 OK1DFC (54/55), 0105 W2UHI (55/55) EN, 0109 OZ6OL (54/54) JO, 0201 WD5AGO (35/56 EM - Tommy's SSB was very distorted, 0212 OE9XXI (57/55) JN, 0248 CT1DMK (54/54) IN, 0255 G3LTF (55/55) IO, 0319 VE6TA (54/44) DO33 for initial #162, 0324 WA4NJP (54/54) EM, 0340 W7SZ (449/53) CN - on way SSB for #163, 0415 KD5FZX (55/53) EM #164, 0428 W0KJY (54/54) DN, 0443 OH2DG (549/33) KP – one way SSB, 0553 WA8WZG (54/53) EN and 0940 JA7BMB (54/55) PM. Heard but got aways included F5PL, N6BQ and NL7F. I also tried e-mail arranged skeds with RW3PB on 1296 during the following week. We copied each other on all skeds, but somehow a QSO eluded us. In the contest I worked 24x12 (with 2 CW to SSB QSOs).

NETNEWS

by

[G4RGK, David Dibley](#)

DJ9BV has a new email address, private amateur radio: and for DUBUS affairs: [DJ9BV](#)

ON5OF sends his apologies to OH2DG for missing their sked. Dirk is still looking for help to activate Monaco on EME, but has not had any replies to his request for help.

WE2Y worked in his skeds partial HP3XUG, G3SEK, DL7APV, I5MPK, K5WXN and NC1I.

LU4HO will not be QRV on EME until further notice. Marc has moved to Buenos Aires till March.

KD4LT has copied VE3FAC and says he has a great xmit signal, but is a bit down on RX.

9H1ES asks what is best solid-state PA for 70 cm. He has had a lot of trouble with his 23 cm PA. It blew up. He has made a new plate insulator, but has some parasitic oscillations. His 10 GHz RX is working well and he is getting Sun noise.

He will be on ready to transmit on 10 GHz with 20 W and a 2.4 m dish soon.

K9BCT is back from his trip. He has finally found a good way to combine his 2 PAs on 23 cm. The combiners are rated at 100 W, but running at 500w and show no heating. They are Microlab/FXR directional couplers Model CA35N (750-1500 MHz) with 5 dB loss across band. You can get info at:

[750 - 1500 MHz Couplers](#)

DL9KR is looking for QSLs from W7EME and W7ALW. W4HHK reports info on the solar activity is available at:

[Solar Activity Info from Holland](#)

This is the Dutch short wave listener site. It contains very good information.

DF3RU was on for all Jan skeds except W6WE, but his having problems with his PA output level.

WA4NJP heard W7KK during there sked, but did not complete.

W7KK heard Ray towards end.

WB0JQQ, Randy (EM39) is trying to get 1296 EME running. He reports that W4OP is hearing well with a 12' dish and cir pol.

W7SZ worked random on 23 cm in Jan K5JL, N2IQU and a few on SSB including OE9ERC, OE9XXI and W2UHI. He heard VE6TA. He is running 125 W and is experimenting with a Diagonal feed.

LX1DB worked on 9 cm on 26 Jan W5LUA and on 3 cm SM4DHN (559/449) and WA7CJO (569/O) on random. He also heard VE4MA calling OK1KIR.

DJ5MN is looking for cards from VE3ONT, KB2AH and OE3XXI. He asks if K5JL, VE1ALQ, N2IQU and KD4LT received his cards?

F6DRO , Dom now has 3 m dish and hopes to be on 23 and 3 cm soon.

VE1ALQ was on 70 cm during the SW and reports that CT1WB was low in freq, but thinks he got RRRs during their sked. He added 4 initials with OH2DG, CT1WB (?) and VK4AFL on 70 cm and RW3BP on 23 cm.

W7CNK heard nil in skeds with IK5QLO (2 yagis to 2 yagis) and worked G4ERG, DF3RY, WE2Y, W1ZX and NC1I. He reports that W1ZX was running up to (5/6) on his S meter. The 2nd night he worked 3 QSOs including SSB contacts with NC1I & KA0RYT. WE2Y was QRV during the SW on 432 and worked a few including W7CNK, DL9NDD. He wonders who called on SSB?

PA3CSG worked RW3BP on 23 and VK4AFL (QG62oj) on 70 cm. DK3WG did not complete with WW2R.

K5WXN worked WE2Y and K1FO on 70 cm and heard a lot more on.

KB4CNI completed with DK3WG and JA5OVU, but could not dig DL7APV out of the mud. He heard a lot of stations very well including K1FO, NC1I and W7CNK.

K3HZO is back from Europe and working on his 23 cm system. He replaced his preamp and now has 11 dB of Sun noise. He worked during the SW OE9XXI and OE9ERC on SSB.

K2DH had a good time during the 1296 SSB contest. He worked on 23 SSB 11x5. Dave QSO'd in skeds DJ5MN, OH2DG and RW3BP, but nil heard from HA5SHF.

WA8WZG worked on 1296 SSB K2UYH, OE9ERC and OE9XXI and on CW VE6TA during the SW.

KA0RYT was active on 70 cm during the SW and worked I5MPK with very loud sigs. He also copied quite a few 3 way SSB QSOs on 70 cm.

N2HLT worked K1FO but not W1ZX during the SW. KL7HFQ heard a lot of stations on 70 cm during the SW. He QSO'd worked W1ZX and heard I5MPK. He is still repairing damage to his array from high winds and the very low temperature, very low.

WA9FWD has a new 23 cm preamp and feedhorn. Hopefully he will have them mounted soon. He also has a xverter and a single tube 7289 PA ready for 13 cm.

PA3CSG has got a new TWT P/S working, which will give him 4 dB more power on 10 GHz, but his dish is still down.

SM2CEW did not operate SSB Contest on 23 cm.

HB9BBD Dominique missed at least one in Eur (RW3BP) and obviously some in W due to his limited window to the west during the 1296 SSB Contest.

FOR SALE

PA0PLY has available a **DB6NT-MK2 oscillator unit RFOutput at 12 Ghz. Nice small design intended to be used for a 24 GHz transverter, and a HP432C power meter and 10 Ghz WG head.**

W1ZX has for sale a **MFJ-784 Super DSP filter \$US150, HP 415E SWR meter-brown unit (later build unit) \$US95, Bird 43 wattmeter \$US190 with a new meter movement, (2) Bird 43 wattmeter, fair condition (cracked/broken meter face-needs paint job) \$US120 or best offer, Noise Com Noise Diodes NC305, glass package \$US33, flat package \$US42. All prices are + shipping. Call Willie at 301 645 5584 between 2000-2300 EST, FAX 301 645 6853, 24 hrs, e-mail: [.W1ZX](#)**

WD5AGO has a **new stock of 23 cm LNA boards available and ready for sale .**

DL8YHR has a **2 m EME PA and power supply for sale. The amp is a Creative PS1000 using a 3CX800A7. Price is around 2400 DM.**

WA4NJP is **looking for info on the YD-1050 not the YL-1050. Ray needs the specs .**

ON5OF is still **looking for F-6007 tube Contact Dirk at e-mail: [ON5OF](#)**

K9BCT reports **feedback is positive from the radiators mentioned last month that Randy sent out from Phoenix. He has also found some CAA-322 tubes and 6897 tubes that look like the 7289 family. W7QX has 30 to 50 of these tubes.V They look old but not abused. He wants \$2 a piece - contact W7QX. [There was a report that one of these tubes is basically a diode.]**

DF3RU **needs an HP-83b noise sourceV or satisfactory substitute. Karl is also looking for TH-338V .**

K3HZO is **looking for isolator for 13 cm with SMA connectors.**

NU7Z has **for sale a CV-2810 complete with P/S, tube and manual for 903 MHz. call Rick.**

FINAL: K1FO suggests in his report that we consider moving the SWs to more favorable times to increase participation. Moon times have been into the wee hours the last few SWs and Steve feels that this cuts down on activity. I am sure we lose some stations because of the late hours, but sometime late hours can help. There less chance of a conflict with family and social activities in the early hours. What do you think about this issue? What do you think about a 70 cm SSB?

WA7CJO corrects comments in the last NL about the 1st solid state QSO on 10 GHz. It was by G3WDG you see Jim's report.

This may sound like a broken record, but the NL needs more technical material. Keep sending in your ideas and circuits – they are needed, and reports too! Good luck in the DUBUS/REF Contest.

CU on the Moon. 73, AI - K2UYH



SSB CONTEST SCORES

OE9XXI	(32x2+1x1)	= 910 points
OE9ERC	(30x2+1x1)x13	= 793 points
K2UYH	(22x2+2x1)x12	= 552 points
N2IQU	(22x2+1x1)x8	= 360 points
K5JL	(16x2+1x1)x12	= 342 points
CT1DMK	(7x2)x5	= 70 points
OZ6OL	(9x2)x3	= 54 points
W2UHI	(6x2)x4	= 48 points
VE6TA	(5x2)x3	= 30 points
N6BQ	(4x2)x3	= 24 points
OH2DG	(5x2+1x1)x2	= 22 points
ON5RR	(5x2)x2	= 20 points
HA5SHF	(1x3+2x1)x1	= 5 points

TECHNICAL

G3LTF has sent in a drawing of his rotatable 432 feed which several people have asked him about recently. Peter has used it successfully with dishes from 0.5 to 0.30 f/d ratio and diameters from 4 to 6 meter.

[Rotable dish feed by G3LTF.](#)

[HB9SV, 16 Yagi 432 Array.](#)

[KB4CNI, 8 * FO33 approx 28 dBi gain.](#)

NA EME CONFERENCE IN SUMMER OF 1999

[Mark, N2IQU](#) is organizing an informal warm up to EME2000 scheduled for Brazil in the summer of 2000 (organizer on site is:

[Don, PY5ZBU](#)

Mark's conference is EME Symposium 99, a beginner's workshop, and scheduled

for August 20- 21 in Syracuse, NY. The objective is to bring in new blood. Many old hands will be there to tell of their experiences and to advise hams thinking about trying this most demanding mode of communication. The registration fee will be nominal, just enough to cover meeting room rent and cost of the proceedings: An EME Primer.

[Learn about the upcoming EME Symposium.](#)

[Most recent Schedules from Klaus, DL4EBY](#)

[Lunar Calendar for 1999 prepared by G3SEK](#)

[Netnotes by K1RQG](#)

[Leave Contest Info or Comments to Allen Here](#)

This information was obtained from: [Scott, KD4LT](#)

[Return](#)

[Top Page](#)

[Rein, W6/PA0ZN](#)

19981226
